

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES B. PHILIP Jr., and CHARLES W. GOMEZ

Appeal No. 95-3624
Application No. 08/150,465¹

ON BRIEF

Before JOHN D. SMITH, PAK and KRATZ, Administrative Patent Judges.

PAK, Administrative Patent Judge.

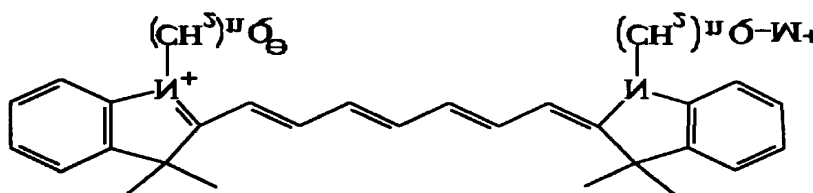
DECISION ON APPEAL

James B. Philip, Jr. et al. (appellants) appeal from the examiner's final rejection of claims 1 through 20, which are all of the claims pending in the application.

¹ Application for patent filed November 10, 1993.

The subject matter on appeal is directed to a combination of particular water-soluble, infrared absorbing indolenine dyes in a hydrophilic binder for photothermographic antihalation systems. See specification, pages 3 and 4, in conjunction with Brief, page 6. This subject matter is adequately described in claim 1 which is reproduced below:

1. A photothermographic element comprising a substrate having on at least one side thereof a photothermographic system comprising silver halide spectrally sensitized to the infrared region of the electromagnetic spectrum, a light source, a silver reducing agent for ion, and a silver binder, said element further comprising at least one hydrophilic layer which contains an infrared-absorbing dye having a central nucleus of the formula



region
 electrom
 spectrum
 insensit
 silver
 reducing
 silver
 a

wherein
 n is an integer of 1 to 12,

Appeal No. 95-3624
Application No. 08/150,465

Q is an ionic acidic moiety,
and M is a cation,
in an amount sufficient as to provide a transmission optical
density of at least 0.1 at the wavelength of maximum
sensitivity of said sensitized silver halide.

As evidence of obviousness, the examiner relies on the
following prior art references:

Lea 1989	4,835,096	May 30,
Ohno et al. (Ohno) 1989	4,839,265	Jun. 13,
Yoshida et al. (Yoshida) 06, 1992	5,153,112	Oct.

Claims 1 through 20 stand rejected under 35 U.S.C. § 103
as unpatentable over the combined disclosures of Lea and
either Ohno or Yoshida.

We reverse.

The examiner's § 103 rejection is predicated on the
ground that it would have been obvious to use the antihalation
dyes described in Ohno or Yoshida as the antihalation dye for
the photothermographic element described in the Lea reference.
In maintaining the § 103 rejection, the examiner recognizes
that Ohno or Yoshida teaches that its antihalation dyes are
used in a wet photographic system (not a photothermographic

Appeal No. 95-3624
Application No. 08/150,465

(dry) system) and leave a stain during the processing. See Answer, pages 3

and 4. To remedy these deficiencies, the examiner asserts (Answer, pages 3 and 4) that

it has been common in the art to use the antihaltion [sic, antihalation] dyes in both [the wet] photographic material and [the dry] photographic material for halation prevention and irradiation prevention. . . .

. . . the stain found in the wet processing which caused by the wet processing would not have been expected to be found in the dry processing. The problem associated with the use of the infrared absorbent in the photothermographic material is not the stain found after dry processing, but the color of the dyes in the infrared absorbing layer which causes undesirable high back ground density (Dmin).

The above assertions, however, are unsupported by or negated by the evidence proffered by the examiner himself. First, the very prior art relied upon by the examiner, namely Lea, appears to contradict the examiner's position regarding the use of a chemical compound useful for an antihalation dye from a wet photographic system as the antihalation dye for a dry photographic system (silver halide photothermographic imaging material). Specifically, the Lea reference states (column 1, line 58 to column 2, line 11) that:

Appeal No. 95-3624
Application No. 08/150,465

Many cyanine and related dyes are well known for their ability to impart spectral sensitivity to a gelatino silver halide system. The wavelength of peak sensitivity is a function of the dye's wavelength of peak light absorbance. Whilst many such dyes provide some spectral sensitisation in dry silver formulations the dye sensitisation is often very inefficient and it is not possible to translate the performance of a dye in gelatino silver halide systems to dry silver systems. The emulsion making procedures and chemical environment of dry silver systems are very harsh compared to those of gelatino silver halide systems. The presence of large surface areas of fatty acids and fatty acids salts restricts the surface deposition of sensitising dyes onto silver halide surfaces and may remove sensitising dye from the surface of the silver halide grains. The large variations in pressure, temperature, pH and solvency encountered in the preparation of dry silver formulations aggravate the problem. Thus sensitising dyes which perform well in gelatino silver halide systems are often inefficient in dry silver formulations.

Second, the examiner does not refer to or supply any evidence which supports his assertion regarding the stain. Nor does the examiner refer to or supply any evidence which supports his assertion regarding the problems associated with the use of the infrared absorbing dyes in the photothermographic material.

Appeal No. 95-3624
Application No. 08/150,465

In view of the forgoing, we are convinced that the examiner has not carried his burden of demonstrating a prima facie case of obviousness within the meaning of 35 U.S.C. § 103. Accordingly, we reverse the examiner's decision rejecting claims 1 through 20 under 35 U.S.C. § 103.

Appeal No. 95-3624
Application No. 08/150,465

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

REVERSED

JOHN D. SMITH)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
PETER F. KRATZ)	
Administrative Patent Judge)	

Appeal No. 95-3624
Application No. 08/150,465

Mark A. Litman
3M Office of Intel. Prop. Counsel
P.O. Box 33427
St. Paul, MN 55133-3427

JENINE GILLIS

Appeal No. 95-3624

Serial No. 08/150,465

Judge PAK

Judge JOHN D. SMITH

Judge KRATZ

Received: 2/24/99

Typed: 2/24/99

DECISION: REVERSED

Send Reference(s): Yes No
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Remanded: Yes No

Brief or Heard

Group Art Unit: 1506

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

Palm: _____

Mailed:

Updated Monthly Disk (FOIA): _____

Updated Monthly Report: _____

Appeal No. 95-3624

Application No. 08/150,465